

# SAFETY NOTE

## Sealing Sewers for Hot Work

This Safety Note is being issued because of recent observations, during field audits, of the methods being used to seal sewers for hot work. It is intended to provide guidance on the acceptable methods for properly sealing drains within a 50' radius of the proposed hot work. You can also refer to Refinery Instruction 341, Section 6.0, for information on the requirements of sealing sewer systems prior to performing hot work.

If you have any questions about the proper sealing techniques for drains in your area contact your local safety representative or Plant Protection.



The photograph above depicts the use of a commonly used fire resistant blanket to seal a surface drain. This method of sealing a drain is not acceptable because it provides opportunity for weld slag and grinding sparks to find their way down into the sewer, which could result in a fire or explosion. Secondly, since the blanket does not “seal” the surface drain, the likelihood of hydrocarbon vapors escaping from the sewer is increased.



The photo above depicts a surface drain that has been sealed with a sandbag. A burlap bag is filled with sand and then placed inside of another bag that is made of a tightly woven synthetic material that prevents sand from entering the sewer. When properly placed over the drain, the sand bag conforms to the contours of the surrounding area doing a good job protecting the area from spark and slag intrusion or vapor releases.





The sewer above is covered with a manufactured product that is made of an impervious material. They're usually blue and yellow in color. Weights have been sewn into the covers (between the two layers) that assist in sealing drains. This method of sealing a sewer is approved for use in the Refinery only if used on a flat surface (as shown). They are available from the Central Tool Room.



This last picture shows an approved sewer sealing system. It is a product called the Nsert-A-Seal and it is installed into the drain (after the drain cover is removed). Once installed, the Nsert-A-Seal is then filled with water. These seals are available at the Central Tool Room.